LEVIN RICHMOND TERMINAL CORP.

MAINTENANCE DREDGING – FY13

RICHMOND, CA

DREDGE (Berth A - Advance Maintenance Trench) & DISPOSAL (Berth B)

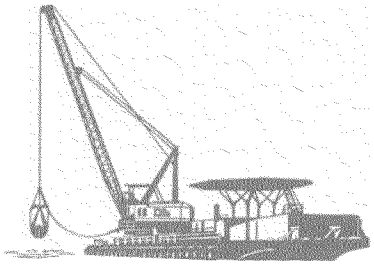
PERMIT 2008-00399S, EPISODE #3

SUBMITTION May, 2013

SUBMITTED BY:

THE DUTRA DREDGING COMPANY

A MEMBER OF THE DUTRA GROUP



DUTRA DREDGING COMPANY
A MEMBER OF THE DUTRA GROUP

May 6, 2013

Serial-LRTC-FY11-01

Attention: **Debra O'Leary - DMMO**
Operations and Readiness Division
U.S. Army Corps of Engineers, San Francisco District
1455 Market Street
San Francisco, CA 94103

Re: **Levin Richmond Terminal Corp**
Maintenance Dredging FY13
LRT Berth A - Advance Maintenance Trench
COE-SF Permit #2008-00399S, BCDC Permit M82-7
Dredge & Disposal (Berth B) Plan – Episode #3

Dear Ms. O'Leary;

On behalf of the Levin Richmond Terminal Corp and pursuant to COE-SF Permit #2008-00399S & BCDC Permit M82-7, Special Conditions, the Dutra Dredging Company submits the enclosed document containing the Dredge & Disposal (Berth B) Plan for the Levin Richmond Terminal Episode #3 Dredging.

If you have any questions regarding the enclosed submittals, please contact our office at (415) 455-8031 or my cell phone (415) 254-4443.

Sincerely,
The Dutra Dredging Company

John A. Krause
Division Manager

cc: Jim Cannon, LRTC

LEVIN RICHMOND TERMINAL CORP.
MAINTENANCE DREDGING – FY13
RICHMOND, CA
DREDGE & DISPOSAL (Upland Berth B)
PERMIT 2008-00399S, EPISODE #3
Submitted on May, 2013

DREDGING OPERATION PLAN

The Dutra Dredging Company has been contracted by the Levin Richmond Terminal to perform maintenance dredging operations at their **LRT Berth A**. In addition to the plan laid out here, Dutra Dredging will strictly adhere to all the issues permits for the project.
General contract information is as follows:

1) GENERAL PROJECT NFORMATION

PROJECT ITEMS	Dredging of LTRC
CONTRACT NUMBER	
NOTICE TO PROCEED	November 10, 2011
AWARDED CONTRACT AMOUNT	
CORPS PERMIT NUMBER	2008-00399S
PREVIOUS EPISODE START DATE	June 3, 2010
PREVIOUS EPISODE END DATE	June 5, 2010
EPISODE NUMBER	#3
EPISODE START DATE	June 1, 2013
EPISODE COMPLETION DATE	July 1, 2013
TYPE OF DREDGE WORK	Maintenance
QUANTITY OF MATERIAL THIS EPISODE	3,600 CY
DISPOSAL SITE	LRTC Berth B
DESIGN DEPTH	-45.0 + 0'
DESIGN ENGINEER	LRTC
CONTACTOR / SUB-CONTRACTORS	Dutra Dredging Company

2) DREDGE QUANTITIES – The LRTC has performed a Pre-dredge survey of **Berths A.** The dredge volume calculations are as follows: (see attached Before Dredge Survey)

DREDGE QUANTITIES Total volume dredged has been estimated at 3,600cy. Dredge Area will be re-surveyed prior to the startup dredging operations. Volume calculations will be based on the Pre-Dredge Survey.

BERTH AREAS	DREDGE DEPTH (MLLW)	EPISODE NO.	DISPOSAL AREA	ADV MAIN GRADE	SLOPE	TOTAL (cy)
Berth A (Advance Maintenance Trench)	-45.0 +0'	1	Upland Berth B	3,140	460	3,600
Totals				3,140	460	3,600

We are seeking to start dredging and disposal operations June 1st , 2013 and upon approval of the Dredge Operations Plan (See Pre-Dredge Survey)

3) EQUIPMENT LIST

The Contractor will be utilizing the following pieces of equipment during dredging operations. (see attached equipment specification sheets)

EQUIPMENT NAME	EQUIPMENT TYPE	EQUIPMENT SIZE	VHF CALL SIGN
DB "Beaver"	Clamshell Dredge	5 cy Bucket	KX7468
Scow "HB 46"	Hopper Barge	3,000 cy	KX7468
Scow "CSM 30"	Hopper Barge	2,000 cy	
Trojan	Tending	55' x 16'	KX7468
Jeanette C	Tender Tug	73' x 24'	KX7468
Survey #1	Survey Boat	23' x 9'	KX7468

4) DREDGING PLAN & PROCEDURES

1) **Project Layout -** Prior to commencement of dredging operations, the designed project will be laid out by "dredge cuts" and positioning stations for the dredge operator. The clamshell dredge will dig along the dredge cuts by station. **The area to be dredged is hatched in blue**. **(See attached Dredge Cut Layout on Following Page)**

   The dredge cuts will be oriented north south and dredging will commence along the dock face.

2) **Overflow Safeguard –** Both to ensure that all material and water remain in the barge and due to the floatation restriction at the offloading area, the barges will only be filled to 80% capacity therefore safeguarding against any potential overflow issues.

3) **Dredging Wastewater Restriction Plan –** Dutra Dredging will be utilizing the following (1) methods to limit free standing dredging wastewater: **(NO OVERFLOW WILL BE ALLOWED)**

   A) Cable Arm Bucket- with De-watering Vents: designed to limit water from spilling back into the bay and also limiting the amount of water loaded into the scows.

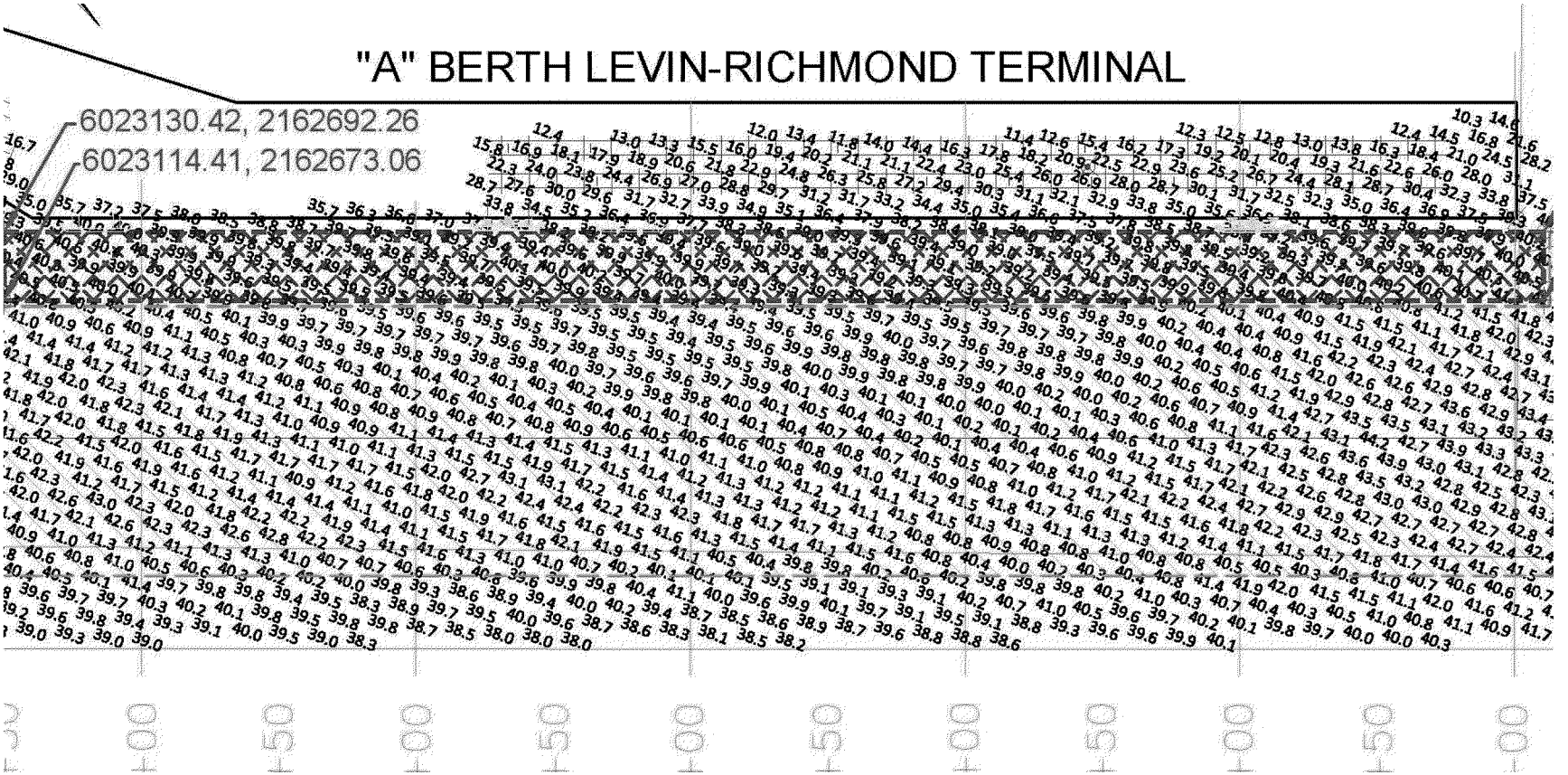
4) The clamshell dredge will dig along the dredge cuts by station; lead line soundings will be taken at 40' intervals to assure tide-corrected depths are within the required lines and grades as specified.

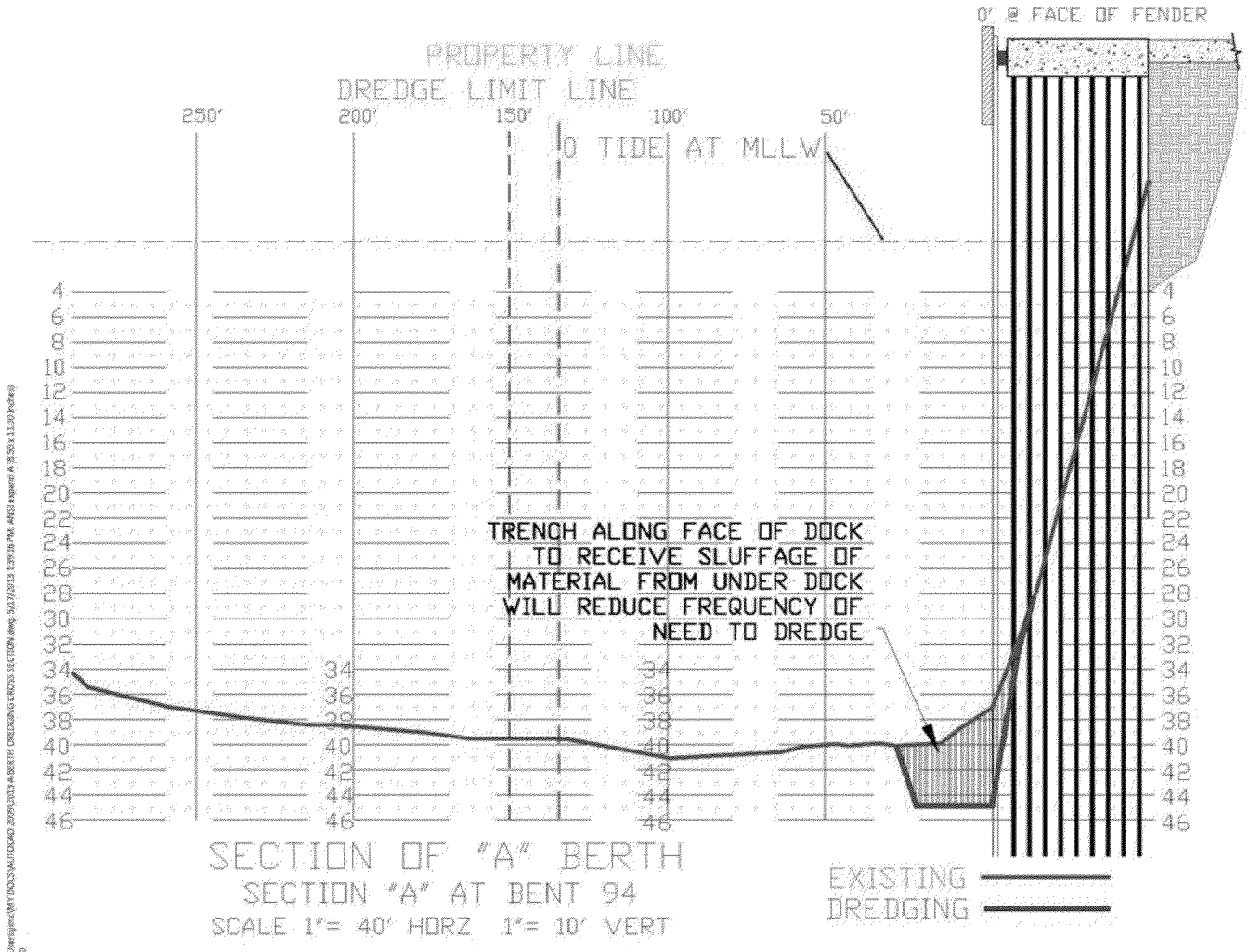
5) Dredged material will be placed from the clamshell bucket into the dump scows. Material will not be released from the bucket prior to the bucket being inside the combing of the scow. The bucket will be held open over the barge until all the material and water has drained from the bucket. This will help eliminate resuspension of the material thru the water column.

6) Each scow will be inspected and tested to ensure minimal material loss during transportation. Draft marks for scows will be recorded prior to departure from the dredge site and prior to disposal.

7) Prior to any disposal operations or changes in dredging locations the VTCS will be notified. All project equipment will monitor channels 13, 14, and 80.

8) Daily Hydrographic surveys will be conducted as per specifications and as part of the C.Q.C. Plan.





SECTION OF "A" BERTH

SECTION "A" AT BENT 94

SCALE 1"= 40' HORZ 1"= 10' VERT

9) **Project Layout -** Prior to commencement of dredging operations, the designed project will be laid out by "dredge cuts" and positioning stations for the dredge operator. The clamshell dredge will dig along the dredge cuts by station.

A) Dredge Cuts and Limits will be imported into the dredge tracking system (Hypack). This will show the operators all berth limits and dredge areas.

B) Berths A will be dredged based on availability and order of priority.

1) Dredging Berths A (-45.0') with disposal of dredged material to LTRC Berth B Upland for drying and disposal.

C) CQC inspection will be a daily part of the dredge and disposal operation. Daily CQ surveys and lead line soundings will be taken at 50' intervals to assure tide-corrected depths are within the required lines and grades as specified in the Specs.

D) Prior to any disposal operations and/or changes in the dredging locations, the VTCS will be notified.

E) **Pre, Post Dredge Surveys** and Daily Hydrographic surveys will be conducted as per USACE Survey Standards.

10) **Dredging Wastewater Restriction Plan –** Dutra Dredging will be utilizing the following (2) methods to limit free standing dredging wastewater: **(NO OVERFLOW WILL BE ALLOWED)**

B) Internal Discharging System : No Discharge will be allowed on this project. The Hopper Barges to be used are solid state and do not discharge into the Bay.

C) An Environmental Cable Arm Bucket- With De-watering Vents: designed to limit water from spilling back into the bay and also limiting the amount of water loaded into the scows.

11) **Dredging Procedures**

Dredging will commence in Cut 1 on the northwest edge of Berth A. Dredging will proceed southwest through each sample area towards the end of Berth A. All dredging activity will be within the required silt curtain separating the turbid dredge water from the bay water. The silt curtain will only be opened to allow the transit of the disposal barges to Berth B.

As stated above, all dredging activity will be performed with an Environmental Cable Arm Bucket used to reduce turbidity and to the largest extend possible.

12) **Solid Debris Containment and Disposal –** All the scows will be equipped with a steel grid grizzly with nominal openings 12"x12" to separate debris as required. A containment boom and curtain will be put in place as needed if floating debris is encountered. Material will be dredged utilizing a clamshell dredge. The dredged material will be dropped through the 12" x 12" grid grizzly prior to entering the hopper of the dump scow. This will assure any solid debris and/or artificial objects from passing into the hopper of the dump scow, eliminating any solid debris from being offloaded into the disposal site. Solid debris and artificial objects trapped on the grizzly will be removed and stored on the deck of the clamshell dredge. Upon completion of a dredging episode all solid debris will be offloaded into debris boxes at our Alameda yard and disposed of at an approved upland location. If we encounter a lot of debris (i.e. pile, logs, wire, trash, etc.) we will offload on a more frequent bases. (see attached Solid Debris Management Plan)

A) DISPOSAL: Material will be dredged utilizing a clamshell dredge. The dredged material will be dropped through the 12" x 12" grid grizzly prior to entering the hopper of the dump scow. This will assure any solid debris and/or artificial objects from passing into the hopper of the dump scow thus eliminating any solid debris from being disposed.

5) HORIZONTAL AND VERTICAL CONTROL

Project horizontal and vertical positioning will be accomplished using the following Control Point:

1) **Vertical Datum based on benchmark set at the southeast corner of the Berth A dock at Elevation 12.86' MLLW and N2162312.91, E6023593.35. The DGPS equipment on the survey boat, dredge, and tow boat will be certified for sub-meter accuracy utilizing the benchmark. As a backup differential, we will utilize US Coast Guard Nav. Station Point Blunt.**

2) **Vertical Datum based on NOAA Tide Gauge located on LRT Berth A**

3) **Plane and Grid coordinates are based on Lambert Projection Zone III, California**

4) **Tidal Control / Monitoring**

A) **Automatic Recording Tide Gages –** Dutra Dredging will be installing (1) Tide Gauges inside the limits of the dredge area. (Located next to the NOAA Tide Gauge)

B) **Averaging Tides / Recording Intervals** - The recorded readings from the tide gauges will be averaged together to compute the tidal change. Both tide gauges will provide continues recordings of tidal changes on 15 min. intervals and/or every one-foot change in tide.

C) **Tidal Datum** – Tidal readings will be recorded in MLLW Datum.

D) **Tidal Reading Display –** Tidal readings will be visually displayed on a real-time bases to the dredge operator.

6) Control Equipment and Systems

EQUIPMENT	POSITION CONTROL	VERTICAL CONTROL	TIDEAL CONTROL	AZIMUTH CONTROL	SOFTWARE / HARDWARD
Survey #1	Trimble AGE-182	Innerspace 448 Fathometer, 3 degree transducer	Hazen HTG 4000	Sperry	Hypack Max
Dredge DB "Beaver"	Trimble AGE-182	N/A	Hazen HTG 4000	Anschutz	Dredge-Pac / Nobel Tech
Tender Tug Trojan	Trimble	N/A	N/A	Sperry	SAIC / Nobel Tech / SAIC

7) CONTRACTOR REPRESENTATIVES

Name	Title	Phone Number
John A. Krause	Division Manager	(415) 258-6876 / Office
		(415) 254-4443 / Cell
		(510) 337-8855 / Fax
Chris Milam	C.Q.C. Representative	(415) 258-6876 / Office
		(415) 218-6739/ Cell
		(510) 337-8855 / Fax
Dennis Salyers	Operations Manager	(510) 497-5289 / Cell
		(510) 337-8855 / Fax
Cliff Hunt	Administrative Safety Supervisor	(415) 458-5499 / Office
		(415) 721-1394 / Fax

8) PLACEMENT OPERATIONS AND MONITORING

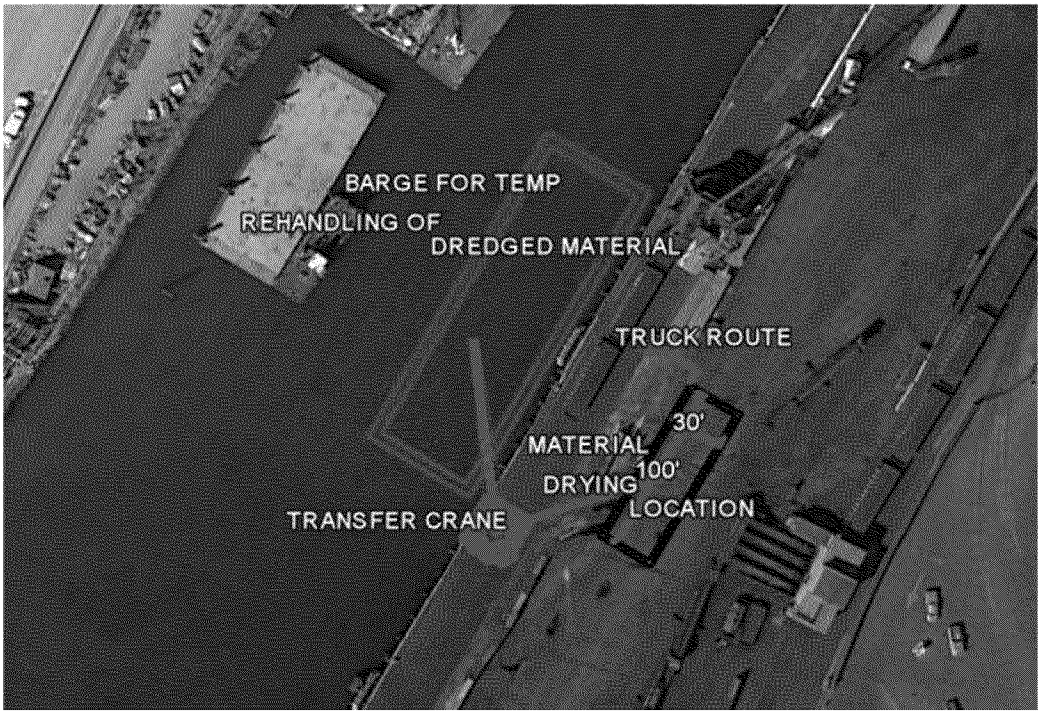
DISPOSAL OPERATIONS – BERTH B

1) PROCEDURES

B) UPLAND DISPOSAL – BERTH B: Material will be dredged utilizing a clamshell dredge. The dredged material will be dropped through the 12" x 12" grid grizzly prior to entering the hopper of the dump scow. This will assure any solid debris and/or artificial objects from passing into the hopper of the dump scow, eliminating any solid debris from being offloaded into the disposal site.

C) TRANSPORTATION – BERTH B: Material will be transported via Dump Scows from the dredge area to Berth B. Upon arrival at Berth B the dump scows will be tied along side the berth face where they will be offloaded.

Berth B Disposal Offloading



D) OFFLOADING – BERTH B:

A) Dredge Material will be offloaded utilizing a clamshell dredge.

B) The dredge will be positioned along side face of Berth B (see attached Berth B Disposal & Offloading Plan Layout)

C) Loaded dump scows will be positioned in front of the dredge with the bow forward.

D) The clamshell dredge will offload the dredged material out of the dump scow and over the disposal site k-rail. Material and will then be dropped into the disposal area.

D) OFFLOADING SPILL CONTROL

A) As material is being dredged out of the dump scows, the crane operators will let any free standing water and/or excess material fall back into the dump scow.

2) START-UP

Prior to the start of disposal operations, each scow will be inspected to ensure minimum material loss during transportation. Draft marks will be recorded prior to departure from the dredge site and prior to disposal. A scow losing material to cause at least a one-foot difference in overall draft during transit, as recorded by the DDLS, shall be removed from the project and repaired before it is allowed to return.

3) DISPOSAL TRACKING

The Tow Tug will be equipped with a Differential Global Positioning System (DGPS). This system will reference the US Coast Guard Point Blunt Differential Beacon Control Point. The DGPS position will be interfaced with E-Trac's tracking software to create a visual display of the disposal site and the position and route to and from the dredge area. The E-Trac software will also record all position data to, from, and during disposal operations. Printouts will be prepared for each disposal trip and submitted as part of the daily QC Report.

4) DISPOSAL SUBMITTALS

The contractor will submit the following information each Monday per the Permit Requirement:

1) DDLS Disposal Plots, documenting each disposal event.
2) US Army Corps of Engineers, San Francisco District – Dredge Material Disposal Site Log (Weekly)

9) SOLID DEBRIS MANAGEMENT PLAN

As required by the law and in compliance with Local, State and Federal regulations, set forth as follows is the Contractor's Solid Debris Management Plan.

1) SOLID WASTE:

A) All rubbish, garbage, and other discarded solid material resulting from dredging and offloading operations will be retained on board the dredge in provided containers until transfer to appropriate refuse receptacles for upland disposal as necessary. (i.e. logs, wire, trash, etc.)

B) Refuse service used will be an acceptable local refuse company.

2) CHEMICAL WASTE:

A) All chemical waste, such as oil and grease, will be retained onboard in special tanks until pumped off for disposal.

B) Waste oil service will be an acceptable local disposal firm.

3) DREDGING AND SOLID DEBRIS:

E) All material dredged transported through the hydraulic pump will be screened through a debris trap/box prior to entering the discharge pipeline. The debris trap/box will be inspected and emptied periodically to prevent debris from entering the discharge pipeline.

F) All debris floatable or non-floatable greater than 24'' in diameter which is dredged mechanically into the disposal scows, will be removed prior to disposal or placement of dredged material.

G) A containment boom and curtain will be put in place as needed if floating debris is encountered.

4) FLOATING DEBRIS

1) A tending workboat or skiff will be deployed to trap any floating debris resulting from the dredging operations. Once the floating debris has been isolated, it will be picked up by the workboat crew and retained for disposal in compliance with procedures for solid debris.

2) A containment boom and curtain will be put in place as needed if floating debris is encountered.

3) Containment Boom will be stored aboard the dredge and/or on shore and will be deployed in the event of any oil or chemical spills.

10) STORM WATER RUNOFF PLAN

a) **Compliance** – Dutra Dredging will implement a **Total Compliance Policy** with the San Francisco Regional Water Quality Control Board, National Marine Fisheries, and the United States Environmental Protection Agency Region IX permits and regulations. This total compliance policy will contain (3) aspects:

1. **Understanding** – All Dutra C.Q.C. personal will be issued and comply with all local, state, and federal regulation pertaining to this project.
2. **Control Plan Implementation** – Prior to any upland operations our approved runoff plan will be in place.
3. **Corrective Action** – Should there be a breakdown in our runoff plan all upland operations will be Immediately Stopped until all corrective measures have been made.

b) Protection

1) All manhole and catch basins in the designed upland disposal and stock pile areas will be marked, wrapped in HDPE, and blocked off by hay bales.

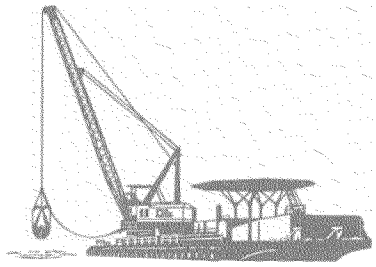
2) Offloading Operations Runoff Control

a) As material is being offloaded out of the dump scows, the crane operator will let free standing and /or excess material fall back into the dump scow prior to being offloaded into the berth B upland disposal area. (see attached Berth B offloading & containment area)

b) **Berth B Runoff Containment & Offloading Containment Bracket** – In order to safe guard against any free standing dredge water or material from spilling back into the bay we will install a **Offloading Containment Bracket**. The bracket will be install on the deck of berth B and will hang over the fender wall. The scows will be mooring under the bracket along side the fender wall. K-rail and Straw Bales will seal off the area before the Berth B Containment Berms (see attached drawing of Bracket)

c) All existing Berth #B Disposal Dikes will be inspected for damage and./or hole that would allow material or water to run into storm drains, the bay, or man holes covers.

May 6, 2013



DUTRA DREDGING COMPANY
A MEMBER OF THE DUTRA GROUP

Commander (POW)
11th Coast Guard District
Building 50-6
Coast Guard Island
Alameda, CA 94501

Subject: Notice to Mariners

Reference: Levin Richmond Terminal
Maintenance Dredging – Berth A Advance Maitenance Trench with Disposal to Berth B

Gentlemen:

We request that a Notice to Mariners be posted regarding our **Dredging Operations** at the Levin Terminal in Richmond Inner Harbor Our clamshell dredges, "DB Beaver" and will carry out dredging operations. Our scow fleet will consist of (2) solid hull scows. The scows will be utilized for all Disposal Operations both to the offloading facility at Levin Terminal Berth B. The capacities of the scows are as follows :(1) scow have a nominal capacity of 3,000cy, (1) capacity 2,000cy The tow tug "Sara Reed" will serve as our tending tug during offloading operations. Support will also be supplied by the tender tug "Trojan". All equipment will monitor Channel 13, 14, and 82. The tow tug will use the call sign KX7468.

Our Dredging operations will commence on or about June 1, 2013 and end on or about July 1, 2013. During this time we will be operating 24 hours / 7 days / week between the Levin Richmond Terminal Berth A (approx. Lat 37.9186 / Long 122.3654) and upland disposal at the Levin Terminal. Dredge Equipment may partial obscure the channel in that location.

Our Operations Manager Mr. Dennis Salyers can be reached at (510) 497-5289.

Mariners are advised to use extreme caution while transiting the dredge area. In the event you have questions concerning our request for a Notice to Mariners, please contact me at (415) 254-4443.

Yours truly,
The Dutra Group

John A. Krause
Division Manager

cc: Debra O'Leary - DMMO
Jim Cannon – LRTC